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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,176	03/09/2004	Michael Charles Shelton	71626 US02	3518

7590 05/16/2007
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EXAMINER

HAIDER, SAIRA BANO

ART UNIT	PAPER NUMBER
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1711

MAIL DATE	DELIVERY MODE
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05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/796,176

Applicant(s)

SHELTON ET AL.

Examiner

Saira Haider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/22/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 1-31, 45, 46, 48-65, 72-77, and 79-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-44, 47, 66-71, and 78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/22/07, 10/5/04, & 5/14/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-44 in the reply filed on 09/26/2006 is acknowledged. Additionally, applicant's election with traverse (in the replies filed on 09/26/2006 and 2/22/2007) of the species reading on claims 32-44, 47, and 66, the election of the following additives: leveling, rheology, and flow control agents and the election of metal is acknowledged. The traversal is on the ground(s) that a search burden does not exist. This is not found persuasive because of the intermediate-final product relationship of the various inventions as well as the different modes of operation of the various inventions. Thus, it is the examiner's position that indeed a search burden does exist. The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-31, 45, 46, 48-65, 72-77, and 79-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions and species there being no allowable generic or linking claim. It is noted that applicant has stated in the reply filed on 2/22/2007 that claims 77-80 belong to the species restriction set by the examiner. However, it is noted that applicant has selected metal as the substrate, thus only claim 78 is considered as belonging to the species elected by applicant. Thus, claims 77 and 79-80 are withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 32-44, 47, 66-71, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. (US 5,668,273).
5. Allen discloses carboxymethyl cellulose esters, specifically a carboxymethyl cellulose acetate butyrate (or propionate) having: a degree of substitution per anhydroglucose unit (DS/AGU) of carboxymethyl of 0.20 to 0.75, a DS/AGU of hydroxyl from about 0.10 to 0.70, a DS/AGU of butyryl (or propinyl) of about 0.10 to 2.60 and a DS/AGU of acetyl of 0.10 to 1.65, and having an inherent viscosity of 0.20 to 0.70 dL/g, as measured in a 60/40 (wt./wt.) solution of phenol/tetrachloroethane at 25 °C (col. 2, line 66 to col. 3, line 60).
6. The Allen reference fails to anticipate the claimed inherent viscosity range of about 0.05 to about 0.15 dL/g (or the claimed range of 0.05 to 0.12, as per claim 39; or the claimed range of 0.07 to 0.11 dL/g, as per claim 42), and the reference fails to disclose the claimed molecular weight and polydispersity values.
7. In reference to the inherent viscosity range, it is noted that the Allen reference discloses a lower limit of 0.20 dL/g, wherein it is the examiner's position that one skilled in the art would have expected the composition of the Allen reference to have the same properties as the claimed composition. Additionally, a difference of 0.05 dL/g (or a difference of 0.08-0.09 dL/g) in the inherent viscosity is not expected to change the properties of the composition. It has been held that a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).
8. In reference to the claimed molecular weight and polydispersity values, it is noted that one of ordinary skill in the art recognizes that a reduction in the viscosity indicates a reduction in the molecular weight. Thus, the molecular weight is considered an inherent property of the

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aforementioned prior art composition. Thus, in view of the structural, chemical and viscosity similarities of the claimed composition that that of the prior art, the properties [molecular weights, polydispersity, clear solution formation (claims 33-36)] applicant claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Note, that because the references do not expressly teach or address the properties of the claimed invention, it does not mean that the properties are not inherently disclosed. Teaching the same compound(s) inherently discloses the corresponding properties. The references cannot possibly teach or address all of the properties, but implicitly all of the properties are present.

9. Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, and the examiner presents evidence or reasoning tending to show inherency, as done above, the burden shifts to the applicant to show an unobvious difference. See MPEP § 2112.

10. In reference to the limitations of claims 47, 66-71 and 78, regarding utilizing the claimed cellulose ester in a coating composition, it is noted that Allen discloses theses limitations. Allen discloses a coating composition comprising: (a) about 0.1 to about 50 wt % of the above described cellulose ester; (b) about 0.1 to 50 wt % of a resin (such as polyester); (b) an organic solvent (including aqueous based solvents); and (d) about 0.1 to 15 wt % of additives (such as pigments comprised of mica). Wherein the total weight of (a) and (b) is about 5 to 70 wt % of the total weight of (a), (b), and (c) (col. 8, lines 14-55; col. 9, lines 15-27; claim 17). Allen discloses that the coating composition can be applied to a variety of substrates, including metal and solid (i.e. shaped) substrates (col. 10, lines 21-30). It would have been obvious to one of ordinary skill in the art to utilize the above obvious-cellulose ester in the coating composition taught by Allen in order to utilize a cellulose ester which exhibits superior compatibility when blended with other coating resins

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thereby yielding clear films with a wider range of coating resins than do conventional cellulose esters (col. 2, lines 58-62).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Haider whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saira Haider
Examiner
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James J. Seidleck
Supervisory Patent Examiner
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